

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B. Tech II Year II Semester Supplementary Examinations May/June-2024
ENGINEERING GEOLOGY

(Civil Engineering)

Time: 3 Hours

Max. Marks: 60

PART-A

(Answer all the Questions 5 x 2 = 10 Marks)

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|---|---|---|-----|----|----|
| 1 | a | Explain the importance of geology in civil engineering works. | CO1 | L2 | 2M |
| | b | Define specific gravity. | CO2 | L1 | 2M |
| | c | Give the classification of rocks. | CO3 | L1 | 2M |
| | d | Define strike and dip. | CO5 | L2 | 2M |
| | e | What are dams and name the types of dams. | CO6 | L1 | 2M |

PART-B

(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

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|---|---|--|-----|----|----|
| 2 | a | Explain the biological factors in the process of weathering. | CO1 | L2 | 5M |
| | b | Give the importance of physical Geology. | CO1 | L2 | 5M |

OR

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|---|---|---|-----|----|----|
| 3 | a | Define geology and explain the different branches of geology. | CO1 | L1 | 5M |
| | b | Describe chemical weathering in detail. | CO1 | L2 | 5M |

UNIT-II

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|---|---|---|-----|----|----|
| 4 | a | Identify the physical properties of Asbestos. | CO2 | L1 | 5M |
| | b | Differentiate between Muscovite and Biotite Mica. | CO2 | L2 | 5M |

OR

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|---|---|---|-----|----|----|
| 5 | a | Discuss briefly the physical properties of Quartz and talc. | CO2 | L2 | 5M |
| | b | Identify the physical properties of Flint. | CO2 | L2 | 5M |

UNIT-III

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|---|---|--|-----|----|----|
| 6 | a | What are the classifications of Igneous rocks? | CO4 | L1 | 5M |
| | b | Write the structure of metamorphic rocks. | CO4 | L1 | 5M |

OR

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|---|---|--|-----|----|----|
| 7 | a | Define rock and describe the classification of rocks. | CO3 | L1 | 6M |
| | b | Describe the origin, texture, structure of sandstone and basalt. | CO3 | L2 | 4M |

UNIT-IV

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|---|---|--|-----|----|----|
| 8 | a | Explain in detail about resistivity methods. | | | 6M |
| | b | Differentiate between true dip and apparent dip of rock formation. | CO5 | L2 | 4M |

OR

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|---|---|---|-----|----|----|
| 9 | a | Classify and describe the difference types of faults. | CO5 | L2 | 6M |
| | b | Write a short note on Importance of Unconformity. | CO5 | L1 | 4M |

UNIT-V

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|----|---|---|-----|----|----|
| 10 | a | What is reservoir? List out the factors contributing to the success of reservoir. | CO6 | L1 | 5M |
| | b | Describe the causes of earthquakes. | CO6 | L1 | 5M |

OR

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|----|---|---|-----|----|----|
| 11 | a | Write a short note on lining of tunnels. | CO6 | L1 | 5M |
| | b | Describe the effects of tunnelling on the ground. | CO6 | L1 | 5M |

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